AMENDMENTS TO THE CLAIMS

- 1. (Original) A pharmaceutical composition comprising at least one compound capable of enhancing gap-junction communication and at least one nucleoside analogue.
- 2. (Original) The composition of claim 1, wherein said compound capable of enhancing gap-junction communication is an aromatic organic acid, a pharmaceutically acceptable salt or an ester or amide of said acid.
- 3. (Original) The composition of claim 2, wherein said aromatic organic acid is a compound of the formula:

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wherein R₀ is aryl (e.g., phenyl, napthyl), phenoxy, substituted aryl (e.g., one or more halogen [e.g., F, Cl, Br, I], lower alkyl [e.g., methyl, ethyl, propyl, butyl] or hydroxy substituents) or substituted phenoxy (e.g., one or more halogen [e.g., F, Cl, Br, I], lower alkyl [e.g., methyl, ethyl, propyl, butyl] or hydroxy substituents);

R₁ and R₂ are each H, lower alkoxy (e.g., methoxy, ethoxy), lower straight and branched chain alkyl (e.g., methyl, ethyl, propyl, butyl) or halogen (e.g., F, Cl, Br, I);

R₃ and R₄ are each H, lower straight and branched chain alkyl (e.g., methyl, ethyl, propyl, butyl), lower alkoxy (e.g., methoxy, ethoxy) or halogen (e.g., F, Cl, Br, I); and n is an integer from 0 to 2;

salts thereof (e.g., Na⁺, K⁺ or other pharmaceutically acceptable salts); stereoisomers thereof; and mixtures thereof.

4. (Original) The composition of claim 2, wherein R₀=aryl, phenoxy, substituted aryl or substituted phenoxy;

R₁ and R₂=H, lower alkoxy, lower straight and branched chain alkyl or halogen;
R₃ and R₄=H, lower alkoxy, lower straight and branched chain alkyl or halogen; and
n=an integer from 0 to 2;

salts thereof; stereoisomers thereof; and mixtures thereof.

- 5. (Original) The composition of claim 3, wherein said aromatic fatty acid is selected from the group consisting of phenylacetic acid, phenylpropionic acid, phenylbutyric acid, 1-naphthylacetic acid, phenoxyacetic acid, phenoxypropionic acid, phenoxybutyric acid, 4-chlorophenylacetic acid, 4-chlorophenylbutyric acid, 4-iodophenylacetic acid, 4-iodophenylacetic acid, 4-iodophenylbutyric acid, α-methylphenylacetic acid, α-methoxyphenylacetic acid, α-ethylphenylacetic acid, α-hydroxyphenylacetic acid, 4-fluorophenylacetic acid, 4-fluorophenylbutyric acid, 2-methylphenylacetic acid, 3-methylphenylacetic acid, 4-methylphenylacetic acid, 3-chlorophenylbutyric acid, 2-chlorophenylacetic acid, 3-chlorophenylbutyric acid, 2-chlorophenylbutyric acid and 2,6-dichlorophenylacetic acid, and the sodium salts of the these compounds.
- 6. (Original) The composition of claim 5, wherein the aromatic organic acid is 4-Phenylbutyrate or a pharmaceutically acceptable prodrug thereof.
- 7. (Original) The composition of claim 2, wherein the aromatic organic acid is 2-Phenylbutyrate or a pharmaceutically acceptable prodrug thereof.
- 8. (Original) The composition of claim 5, wherein the aromatic organic acid is phenylacetic acid or a pharmaceutically acceptable salt or an ester of phenylacetic acid.

 (Original) The composition of claim 1, wherein the compound capable of enhancing gapjunction communication is valproic acid, a pharmaceutically acceptable salt thereof or a prodrug of valproic acid.

- 10. (Original) The composition of claim 1, wherein the compound capable of enhancing gapjunction communication is splitomicin, a pharmaceutically acceptable salt thereof or a prodrug of splitomicin.
- 11. (Original) The composition of claim 1, wherein the compound capable of enhancing gapjunction communication is butyric acid, a pharmaceutically acceptable salt thereof or a prodrug of butyric acid.
- 12. (Currently amended) The composition of any of the preceding claims, claim 1, further comprising a source of deoxyribonucleoside kinase.
- 13. (Original) The composition of claim 12, wherein the source of deoxyribonucleoside kinase is a gene therapy vector.
- 14. (Original) The composition of claim 13, wherein the gene therapy vector is a virus vector.

15. (Original) The composition of claim 14, wherein the virus vector is selected from the group consisting of being a viral vector, in particular a *Herpes simplex* viral vector, an adenoviral vector, an adenovirus-associated viral vector, a lentivirus vector, a retroviral vector or a vacciniaviral vector.

16. (Original) The composition of claim 15, wherein the source of deoxyribonucleoside kinase comprises a composition of packaging cells capable of producing an infective virion comprising said virus vector.

17. (Original) The composition of claim 13, wherein the gene therapy vector is a plasmid vector.

- 18. (Original) The composition of claim 17, wherein the plasmid vector is selected from the group consisting of general eukaryotic expression vectors, vectors for stable and transient expression and epitag vectors as well as their TOPO derivatives for fast cloning of desired inserts.
- 19. (Original) The composition of claim 12, wherein the source of deoxyribonucleoside kinase comprises a protein formulation.
- 20. (Original) The composition of claim 19, wherein the protein is formulated as a liposome composition.

21. (Original) The composition of claim 12, wherein the source of deoxyribonucleoside kinase comprises a composition of human stem cells genetically engineered to express a heterologous deoxyribonucleoside kinase.

- 22. (Original) The composition of claim 21, wherein the stem cells used in a stem cell-mediated therapy approach originates from the same tissue as the tumor cells or the same growth layer or alternatively originates from the bone marrow.
- 23. (Original) The composition of claim 12, wherein the source of deoxyribonucleoside kinase comprises a composition of human progenitor or precursor cells genetically engineered to express a heterologous deoxyribonucleoside kinase.
- 24. (Currently amended) The composition according to any of the preceding claims 12 to 21, claim 12, wherein the deoxyribonucleoside kinase is selected from the group consisting of
 - a. a deoxyribonucleoside kinase having the amino acid sequence of any of SEQ ID
 No 1 to 17;
 - b. a deoxyribonucleoside kinase variant comprising an amino acid sequence having at least [[50]] 70% sequence identity to any of SEQ ID No 1 to 17; and
 - c. a deoxyribonucleoside kinase encoded by a nucleotide sequence capable of hybridising under conditions of high stringency to a nucleotide sequence encoding any of SEQ ID No 1 to 17.

25. (Currently amended) The composition of claim 24, wherein the deoxyribonucleoside kinases emprises comprises a deoxyribonucleoside kinase selected from the group consisting of

- a. a deoxyribonucleoside kinase having the amino acid sequence of any of SEQ
 ID NO 1 to 5; and
- b. a deoxyribonucleoside kinase variant comprising an amino acid sequence having at least 70% sequence identity to any of SEQ ID No 1 to 5 and having dNK activity.
- 26. (Currently amended) The composition according to claim 1, any of the preceding claims, wherein the nucleoside analogue is selected from the group consisting of aciclovir (9-[2hydroxy-ethoxyl-methyl-guanosine), buciclovir, famciclovir, ganciclovir (9-[2-hydroxy-1-(hydroxymethyl)ethoxyl-methyl]-guanosine), penciclovir, valciclovir, (3'-azido-3'-thymidine), AIU (5'-iodo-5'-amino-2',5'trifluorothymidine, AZT (adenosine-arabinoside: Vivarabine), dideoxyuridine). ara-C (cytidineara-A arabinoside), ara-G (9-beta-D-arabinofuranosylguanine), ara-T, 1-beta-D-5-ethyl-2'-deoxyuridine, arabinofuranosyl 5-iodo-5'-amino-2,5'thymine, dideoxyuridine, 1-[2-deoxy-2-fluoro-beta-D-arabino furanosyl]-5-iodouracil, idoxuridine (5-iodo-2'deoxyuridine), fludarabine (2-Fluoroadenine 9-beta-D-Arabinofuranoside), gencitabine, 3'-deoxyadenosine (3-dA), 2',3'-dideoxyinosine (ddI), 2',3'-dideoxycytidine 2',3'-dideoxythymidine (ddT), 2`,3`-dideoxyadenosine (ddA), 2',3'-(ddC), dideoxyguanosine (ddG), 2-chloro-2'-deoxyadenosine (2CdA), 5-fluorodeoxyuridine,

BVaraU ((E)-5-(2-bromovinyl)-1-beta-D-arabinofuranosyluracil), BVDU (5-bromovinyldeoxyuridine), FIAU (1-(2-deoxy-2-fluoro-beta-D-arabinofuranosyl)-5-iodouracil), 3TC (2'-deoxy-3'-thiacytidine), dFdC gemcitabine (2',2'-difluorodeoxycytidine), dFdG (2',2'-difluorodeoxyguanosine), 5-fluorodeoxyuridine (FdUrd), d4T (2',3'didehydro-3'deoxythymidine), ara-M (6-methoxy purinearabinonucleoside), IudR (5-Jodo-2'deoxyuridine), CaFdA (2-chloro-2-ara-fluoro-deoxyadenosine), ara-U (1-beta-D-(E)-5-(2-bromovinyl)-1-(2-deoxy-2-fluoro-beta-Darabinofuranosyluracil), **FBVAU** 1-(2-deoxzy-2-fluoro-beta-D-arabinofuranosyl)-5arabinofuranosyl)uracil, **FMAU** methyluracil, FLT 3'-fluoro-2'-deoxythymidine, 5-Br-dUrd 5-bromodeoxyuridine, 5-CldUrd 5-chlorodeoxyuridine, dFdU 2',2'-difluorodeoxyuridine, (-)Carbovir (C-D4G), 2,6-Diamino-ddP (ddDAPR; DAPDDR; 2,6-Diamino-2',3'-dideoxypurine-9-ribofuranoside), (2'-Azido-2'.3'-9-(2'-Azido-2',3'-dideoxy-β-D-erythropentofuranosyl)adenine (2'-Fluoro-2',3'-dideoxy-β-D-erythrodideoxyadenosine; 2'-N3ddA), 2`FddT 2'-N3ddA(β -D-threo) (9-(2'-Azido-2',3'-dideoxy- β -Dpentofuranosyl)thymine), threopentofuranosyl)adenine), 3-(3-Oxo-1-propenyl)-AZT (3-(3-Oxo-1-propenyl)-3'azido-3'-deoxythymidine), 3'-Az-5-Cl-ddC (3'-Azido-2',3'-dideoxy-5-chlorocytidine), 3'-N3-3'-dT (3'-Azido-3'-deoxy-6-azathymidine), 3'-F-4-Thio-ddT (2',3'-Dideoxy-3'-fluoro-4-thiothymidine), 3'-F-5-Cl-ddC (2',3'-Dideoxy-3'-fluoro-5-chlorocytidine), 3'-FddA (B-D-Erythro) (9-(3'-Fluoro-2',3'-dideoxy-B-D-erythropentafuranosyl)adenine), Uravidine (3'-Azido-2',3'-dideoxyuridine; AzdU), 3'-FddC (3'-Fluoro-2',3'-dideoxycytidine), 3'-FddDAPR (2,6-Diaminopurine-3'-fluoro-2',3'-dideoxyriboside), 3'-FddG (3'-Fluoro-2',3'dideoxyguanosine), 3'-FddU (3'-Fluoro-2',3'-dideoxyuridine), 3'-Hydroxymethyl-ddC

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(2',3'-Dideoxy-3'-hydroxymethyl cytidine; BEA-005), 3'-N3-5-CF3-ddU (3'-Azido-2',3'-3'-N3-5-Cyanomethyloxy-ddU dideoxy-5-trifluoromethyluridine), (3'-Azido-2',3'dideoxy-5-[(cyanomethyl)oxy]uridine), 3'-N3-5-F-ddC (3'-Azido-2',3'-dideoxy-5fluorocytidine), 3'-N3-5-Me-ddC (CS-92; 3'-Azido-2',3'-dideoxy-5-methylcytidine), 3'-N3-5-NH2-ddU (3'-Azido-2',3'-dideoxy-5-aminouridine), 3'-N3-5-NHMe-ddU (3'-Azido-3'-N3-5-NMe2-ddU 2',3'-dideoxy-5-methyaminouridine), (3'-Azido-2',3'-dideoxy-5dimethylaminouridine), 3'-N3-5-OH-ddU (3'-Azido-2',3'-dideoxy-5-hydroxyuridine), 3'-N3-5-SCN-ddU (3'-Azido-2',3'-dideoxy-5-thiocyanatouridine), 3'-N3-ddA (9-(3'-Azido-2',3'-dideoxy-B-D-erythropentafuranosyl)adenine), 3'-N3-ddC (CS-91; 3'-Azido-2',3'dideoxycytidine), 3'-N3ddG (AZG; 3'-Azido-2',3'-dideoxyguanosine), 3'-N3-N4-5-diMeddC (3'-Azido-2',3'-dideoxy-N4--5-dimethylcytidine), 3'-N3-N4-OH-5-Me-ddC (3'-Azido-2',3'-dideoxy-N4-OH-5-methylcytidine), 4'-Az-3'-dT (4'-Azido-3'deoxythymidine), 4'-Az-5CldU (4'-Azido-5-chloro-2'-deoxyuridine), 4'-AzdA (4'-Azido-2'-deoxyadenosine), 4'-AzdC (4'-Azido-2'-deoxycytidine), 4'-AzdG (4'-Azido-2'-(4'-Azido-2'-deoxyinosine), 4'-AzdU (4'-Azido-2'deoxyguanosine). 4'-AzdI deoxyuridine), 4'-Azidothymidine (4'-Azido-2'-deoxy-.beta.-D-erythro-pentofuranosyl-5methyl-2,4-dioxopyrimidine), 4'-CN-T (4'-Cyanothymidine), 5-Et-ddC (2',3'-Dideoxy-5ethylcytidine), 5-F-ddC (5-Fluoro-2',3'-dideoxycytidine), 6Cl-ddP (D2ClP; 6-Chloro-CPDDR; 6-Chloro-9-(2,3-dideoxy-.beta.-D-glyceropentofuranosyl)-9H-purine), ddP; (2',3'-Dideoxy-3'-fluoro-5-chlorouridine; 5-Chloro-2',3'-dideoxy-3'-935U83 fluorouridine; FddClU; Raluridine), AZddBrU (3'-N3-5-Br-ddU; 3'-Azido-2',3'-dideoxy-5-bromouridine), AzddClU; AzddClUrd (3'-Azido-5-chloro-2',3'-dideoxyuridine),

AZddEtU (3'-N3-5-EtddU; CS-85; 3'-Azido-2',3'-dideoxy-5-ethyluridine), AZddFU (3'-Azido-2',3'-dideoxy-5-fluorouridine), AZddIU (3'-N3-5-I-ddU; 3'-Azido-2',3'-dideoxy-5iodouridine), AZT-2.5'-anhydro (2.5'-Anhydro-3'-azido-3'-deoxythymidine), AZT-α-L (α-L-AZT), AZU-2,5'-anhydro (2,5'-Anhydro-3'-azido-2',3'-dideoxyuridine), C-analog of 3'-N3-ddU (3'-Azido-2',3'-dideoxy-5-aza-6-deazauridine), D2SMeP (9-(2,3-Dideoxy-β-D-ribofuranosyl)-6-(methylthio)purine), D4A (2',3'-Dideoxydidehydroadenosine), D4C D4DAP (2,6-Diaminopurine-2',3'-(2',3'-Didehydro-3'-deoxycytidine), dideoxydidehydroriboside; ddeDAPR), D4FC (D-D4FC; 2',3'-Didehydro-2',3'-dideoxy-5fluorocytidine), D4G (2',3'-Didehydro-2',3'-dideoxyguanosine), DMAPDDR (N-6dimethyl ddA: 6-Dimethylaminopurine-2',3'-dideoxyriboside), dOTC (-) ((-)-2'-Deoxy-3'oxa-4'-thiocytidine), dOTC (+) ((+)-2'-Deoxy-3'-oxa-4'-thiocytidine), dOTFC (-) ((-)-2'-Deoxy-3'-oxa-4'-thio-5-fluorocytidine), dOTFC (+) ((+)-2'-Deoxy-3'-oxa-4'-thio-5fluorocytidine), DXG ((-)-β-Dioxolane-G), DXC-α-L-(α-L-Dioxalane-C), FddBrU (2',3'-Dideoxy-3'-fluoro-5-bromouridine), FddIU (3'-Fluoro-2',3'-dideoxy-5-iodouridine), FddT (Alovudine; 3'-FddT; FddThD; 3'-FLT; FLT), FTC (Emtricitabine; Coviracil; (-)-FTC; (-)-2',3'-Dideoxy-5-fluoro-3'-thiacytidine), FTC-α-L- (α-L-FTC), L-D4A (L-2',3'-(L-2',3'-Didehydro-2',3'-dideoxy-5-Didehydro-2',3'-dideoxyadenosine), L-D4FC fluorocytidine), L-D4I (L-2',3'-Didehydro-2',3'-dideoxyinosine), L-D4G (L-2',3'-Didehydro-2',3'-deoxyguanosine), L-FddC (β-L-5F-ddC), Lodenosine (F-ddA; 2'-FddA 9-(2'-Fluoro-2',3'-dideoxy-B-D-threopenta-(B-D-threo); 2'-F-dd-ara-A: furanosyl)adenine), MeAZddIsoC (5-Methyl-3'-azido-2',3'-dideoxyisocytidine), N6-EtddA (N-Ethyl-2',3'-dideoxyadenosine), N-6-methyl ddA (N6-Methyl-2',3'-dideoxyadenosine) or RO31-6840 (1-(2',3'-Dideoxy-2'-fluoro-β-D-threo-pentofuranosyl)cytosine).

27. (Currently amended) The composition according to claim 1, any of the preceding claims, wherein the nucleoside analog is cytidine analog, a guanosine analog or an adenosine selected from the group consisting of dFdC gemcitabine (2',2'-difluorodeoxycytidine), 2chloro-2'-deoxyadenosine (2CdA), CaFdA (2-chloro-2-ara-fluoro-deoxyadenosine), fludarabine (2-Fluoroadenine 9-beta-D-Arabinofuranoside), 2',3'-dideoxycytidine (ddC), 2',3'-dideoxyadenosine (ddA), 2',3'-dideoxyguanosine (ddG), ara-A (adenosineara-C (cytidine-arabinoside), ara-G (9-beta-Darabinoside; Vivarabine), (9-[2-hydroxy-ethoxy]-methyl-guanosine), arabinofuranosylguanine), aciclovir buciclovir, famciclovir, ganciclovir (9-[2-hydroxy-1-(hydroxymethyl)ethoxyl-methyl]guanosine), penciclovir, valciclovir, 3TC (2'-deoxy-3'-thiacytidine), dFdG (2',2'difluorodeoxyguanosine), 2,6-Diamino-ddP (ddDAPR; DAPDDR; 2,6-Diamino-2',3'-9-(2'-Azido-2',3'-dideoxy-β-Ddideoxypurine-9-ribofuranoside), erythropentofuranosyl)adenine (2'-Azido-2',3'-dideoxyadenosine; 2'-N3ddA), 2'-N3ddA(β-D-threo) (9-(2'-Azido-2',3'-dideoxy-β-D-threopentofuranosyl)adenine), 3'-Az-5-Cl-ddC (3'-Azido-2',3'-dideoxy-5-chlorocytidine), 3'-F-5-Cl-ddC (2',3'-Dideoxy-3'-(9-(3'-Fluoro-2',3'-dideoxy-B-D-(B-D-Erythro) fluoro-5-chlorocytidine), 3'-FddA erythropentafuranosyl)adenine), 3'-FddC (3'-Fluoro-2',3'-dideoxycytidine), 3'-F-ddDAPR (2,6-Diaminopurine-3'-fluoro-2',3'-dideoxyriboside), 3'-FddG (3'-Fluoro-2',3'dideoxyguanosine), 3'-Hydroxymethyl-ddC (2',3'-Dideoxy-3'-hydroxymethyl cytidine; BEA-005), 3'-N3-5-F-ddC (3'-Azido-2',3'-dideoxy-5-fluorocytidine), 3'-N3-5-Me-ddC (CS-92; 3'-Azido-2',3'-dideoxy-5-methylcytidine), 3'-N3-ddA (9-(3'-Azido-2',3'-dideoxy-B-D-erythropentafuranosyl)adenine), 3'-N3-ddC (CS-91; 3'-Azido-2',3'-dideoxycytidine), 3'-N3ddG (AZG; 3'-Azido-2',3'-dideoxyguanosine), 3'-N3-N4-5-diMe-ddC (3'-Azido-2',3'-dideoxy-N4--5-dimethylcytidine), 3'-N3-N4-OH-5-Me-ddC (3'-Azido-2',3'-dideoxy-N4-OH-5-methylcytidine), 4'-AzdA (4'-Azido-2'-deoxyadenosine), 4'-AzdC (4'-Azido-2'deoxycytidine), 4'-AzdG (4'-Azido-2'-deoxyguanosine), 5-Et-ddC (2',3'-Dideoxy-5ethylcytidine), 5-F-ddC (5-Fluoro-2',3'-dideoxycytidine), 6Cl-ddP (D2ClP; 6-Chloro-CPDDR; 6-Chloro-9-(2,3-dideoxy-.beta.-D-glyceropentofuranosyl)-9H-purine), ddP: (9-(2,3-Dideoxy-β-D-ribofuranosyl)-6-(methylthio)purine), D4A (2',3'-D2SMeP Dideoxydidehydroadenosine), D4C (2',3'-Didehydro-3'-deoxycytidine), D4DAP (2,6-Diaminopurine-2',3'-dideoxydidehydroriboside; ddeDAPR), D4FC (D-D4FC; 2',3'-D4G (2',3'-Didehydro-2',3'-Didehydro-2',3'-dideoxy-5-fluorocytidine), dideoxyguanosine), DMAPDDR (N-6-dimethyl ddA; 6-Dimethylaminopurine-2',3'dideoxyriboside), dOTC (-) ((-)-2'-Deoxy-3'-oxa-4'-thiocytidine), dOTC (+) ((+)-2'-Deoxy-3'-oxa-4'-thiocytidine), dOTFC (-) ((-)-2'-Deoxy-3'-oxa-4'-thio-5-fluorocytidine), dOTFC (+) ((+)-2'-Deoxy-3'-oxa-4'-thio-5-fluorocytidine), DXG ((-)-β-Dioxolane-G), DXC-α-L-(α-L-Dioxalane-C), FTC (Emtricitabine; Coviracil; (-)-FTC; (-)-2',3'-Dideoxy-5-fluoro-3'-thiacytidine), FTC-α-L- (α-L-FTC), L-D4A (L-2',3'-Didehydro-2',3'dideoxyadenosine), L-D4FC (L-2',3'-Didehydro-2',3'-dideoxy-5-fluorocytidine), L-D4I (L-2',3'-Didehydro-2',3'-(L-2',3'-Didehydro-2',3'-dideoxyinosine), L-D4G

deoxyguanosine), L-FddC (β-L-5F-ddC), Lodenosine (F-ddA; 2'-FddA (B-D-threo); 2'-F-dd-ara-A; 9-(2'-Fluoro-2',3'-dideoxy-B-D-threopentafuranosyl)adenine), MeAZddIsoC (5-Methyl-3'-azido-2',3'-dideoxyisocytidine), N6-Et-ddA (N-Ethyl-2',3'-dideoxyadenosine), N-6-methyl ddA (N6-Methyl-2',3'-dideoxyadenosine) or RO31-6840 (1-(2',3'-Dideoxy-2'-fluoro-β-D-threo-pentofuranosyl)cytosine).

- 28. (Currently amended) The composition according to <u>claim 1</u>, any of the preceding claims, wherein the at least one nucleoside analogue is selected from the group consisting of D4T, ddC, AZT, ACV, 3TC, ddA Fludarabine, Cladribine, araC, gemcitabine, Clofarabine, Nelarabine (araG), and Ribavirin.
- 29. (Currently amended) The composition according to <u>claim 1</u>, any of the preceding claims, wherein the at least one nucleoside analogue is gemcitabine or AZT.
- 30. (Currently amended) The composition according to <u>claim 1</u>, any of the preceding claims, comprising at least two nucleoside analogues, such as at least 3 nucleoside analogues, for example at least 4 nucleoside analogues, such as at least 5 nucleoside analogues.
- 31. (Currently amended) The composition according to <u>claim 1</u>, any of the preceding claims, comprising at least three compounds capable of enhancing gap-junction communication, such as at least 3 compounds, for example at least 4 compounds, such as at least 5 compounds.

32. (Original) A method of treating cancer comprising administering to a patient in need thereof a therapeutically effective amount of at least one compound capable of increasing gap-junction communication, and at least one nucleoside analogue.

- 33. (Original) The method of claim 32, further comprising administering a source of deoxyribonucleoside kinase.
- 34. (Original) The method of claim 32, wherein the cancer is a multicellular cancer type.
- 35. (Original) The method of claim 33, wherein the cancer is selected from the group consisting of glioblastoma, bladder cancer, neuroblastoma, esophageal cancer, tongue cancer, hepatocellular carcinoma, lung cancer, malignant melanoma, ovarian cancer, prostate cancer, renal cell carcinoma, and breast cancer.
- 36. (Original) The method of claim 35, wherein the cancer is breast cancer or glioblastoma.
- 37. (Original) The method of claim 33, wherein the deoxyribonucleoside kinase is administered to the cancer cells using a gene therapy vector.
- 38. (Original) The method of claim 37, wherein the gene therapy vector is a virus vector selected from the group consisting of Herpes simplex viral vector, adenoviral vector,

adenovirus-associated viral vector, lentiviral vector, retroviral vector, and a vacciniaviral vector.

- 39. (Original) The method of claim 38, wherein the gene therapy vector is administered to the cancer cells by implanting a composition of packaging cells capable of producing an infective virion comprising the viral vector.
- 40. (Original) The method of claim 39, wherein the packaging cells are encapsulated, and/or wherein the packaging cells are attached to a support matrix.
- 41. (Original) The method of claim 37, wherein the gene therapy vector is a plasmid vector.
- 42. (Original) The method of claim 41, wherein the plasmid vector is selected from the group consisting of general eukaryotic expression vectors, vectors for stable and transient expression and epitag vectors as well as their TOPO derivatives for fast cloning of desired inserts.
- 43. (Original) The method of claim 33, wherein the thymidine kinase is administered to the cancer cells by implanting a composition of human stem or precursor/progenitor cells, comprising a heterologous expression construct capable of expressing said deoxyribonucleoside kinase, and wherein said human stem cells are capable of forming a tight junction with cells in the tumour.

44. (Original) The method of claim 43, wherein said human stem or precursor/progenitor cells are human neural stem or precursor/progenitor cells.

45. (Currently Amended) The method of any of the preceding claims 32 to 44, claim 32, comprising administration of the composition of any of the preceding claims 1 to 31. claim 1.

46. (Currently Amended) The method of any of the preceding claims 32 to 44, claim 32, wherein said compound capable of enhancing gap-junction communication is 4-phenylbutyrate, or a pharmaceutically acceptable salt thereof.

47. (Cancelled)

48. (Cancelled)

49. (Cancelled)

50. (Cancelled)

51. (Cancelled)

52. (Cancelled)

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53. (Cancelled)	
54. (Cancelled)	
55. (Cancelled)	
56. (Cancelled)	
57. (Cancelled)	
58. (Original) A method of augmenting the therapeutic a	ctivity of a nucleoside analogue
based cancer therapy, said method comprising administeri	ing to a patient an amount of at
least one compound capable of enhancing gap-junction	on communication and thereby
augmenting the therapeutic activity of said nucleoside analo	gue based therapy.
59. (Original) The method of claim 58, wherein said number	cleoside analogue based therapy
further comprises administration of a source of deoxyribonu	cleoside kinase.
60. (Original) The method of claim 58, wherein said comp	pound capable of enhancing gap-
junction communication is 4-phenylbutyrate or a pharmaceu	atically acceptable salt thereof.

- 61. (Currently amended) The method of claim 58, comprising administering the composition according to any of the preceding claims 1 to 31. claim 1.
- 62. (Original) Pharmaceutical articles containing at least one nucleoside analogue and at least one compound capable of enhancing gap-junction communication as a combination for the simultaneous, separate or successive administration in cancer therapy.
- 63. (Original) Articles of claim 62, further comprising a source of deoxyribonucleoside kinase.
 - 64. (Original) Articles of claim 62, wherein said compound capable of enhancing gapjunction communication is 4-phenylbutyrate or a pharmaceutically acceptable salt thereof.
 - 65. (Currently amended) Articles of claim 62, comprising the composition according to any of the preceding claims 1 to 31. claim 1.
 - 66. (Original) Articles of claim 62, wherein the cancer is a multicellular cancer type.
 - 67. (Original) Articles of claim 62, wherein the cancer is selected from the group consisting of glioblastoma, bladder cancer, neuroblastoma, esophageal cancer, tongue cancer, hepatocellular carcinoma, lung cancer, malignant melanoma, ovarian cancer, prostate cancer, renal cell carcinoma, and breast cancer.

68. (Original) Articles of claim 62, wherein the cancer is breast cancer or glioblastoma.